

WHAT IS CLAIMED:

A leak-proof seal, comprising:
at least two layers of liquid-impermeable material at least partially positioned in overlapping relationship;
a plurality of ultrasonic bond points bonding together the at least two layers of liquid-impermeable material;
wherein the bond points are aligned in at least two parallel rows and the bond points in adjacent rows are offset from one another.

2. The leak-proof seal of Claim 1 wherein adjacent bond points are at a distance of between about 0.001 inch and about 0.20 inch from one another.

3. The leak-proof seal of Claim 1 wherein adjacent bond points are at a distance of between about 0.0025 inch and about 0.175 inch from one another.

4. The leak-proof seal of Claim 1 wherein adjacent bond points are at a distance of between about 0.005 inch and about 0.15 inch from one another.

5. The leak-proof seal of Claim 1 wherein each bond point has a diameter of between about 0.005 inch and about 0.25 inch.

6. The leak-proof seal of Claim 1 wherein each bond point has a diameter of between about 0.010 inch and about 0.175 inch.

7. The leak-proof seal of Claim 1 wherein each bond point has a diameter of between about 0.015 inch and about 0.15 inch.

8. The leak-proof seal of Claim 1 wherein the bond points in adjacent rows are offset from one another by about 0 degrees to about 89 degrees.

9. The leak-proof seal of Claim 1 wherein the bond points in adjacent rows are offset from one another by about 15 degrees to about 75 degrees.

10. The leak-proof seal of Claim 1 wherein the bond points in adjacent rows are offset from one another by about 30 degrees to about 60 degrees.

11. The leak-proof seal of Claim 1 further comprising at least three parallel rows of bond points.

12. The leak-proof seal of Claim 1 further comprising at least four parallel rows of bond points.

13. The leak-proof seal of Claim 1 wherein at least one of the layers of liquid-impermeable material is breathable.

14. A combination of a first liquid-impermeable, nonwoven laminate bonded to a second liquid-impermeable material, comprising:

a plurality of ultrasonic bond points joining the first liquid-impermeable, nonwoven laminate to the second liquid-impermeable material;

wherein the bond points are aligned in a pattern such that each bond point is within about 0.001 inch to about 0.20 inch of at least one other bond point.

15. The combination of Claim 14 wherein each bond point is within about 0.0025 inch to about 0.175 inch of at least one other bond point.

16. The combination of Claim 14 wherein each bond point is within about 0.005 inch and about 0.15 inch of at least one other bond point.

17. The combination of Claim 14 wherein the bond points are aligned in at least two parallel rows and the bond points in adjacent rows are offset from one another.

18. The combination of Claim 14 wherein the first liquid-impermeable, nonwoven laminate comprises a liquid-impermeable film.

19. The combination of Claim 14, wherein the first liquid-impermeable, nonwoven laminate is breathable.

20. The combination of Claim 14 wherein the second liquid-impermeable material comprises a nonwoven material laminated to a liquid-impermeable film.

21. The combination of Claim 14, wherein the second liquid-impermeable material is breathable.

22. An absorbent garment comprising the combination of Claim 14.

23. A diaper comprising the combination of Claim 14.

24. A training pant comprising the combination of Claim 14.

25. A feminine hygiene article comprising the combination of Claim 14.

26. An absorbent underpant comprising the combination of Claim 14.

LMB 27. A bonding process for bonding together two layers of liquid-impermeable material, comprising the steps of:

ultrasonically bonding the two layers together with discrete bond points; and

displacing portions of each layer of material, wherein each of the displaced portions is in contact with at least one other displaced portion.

28. The bonding process of Claim 27 wherein at least one of the layers of liquid-impermeable material comprises a nonwoven web.

29. The bonding process of Claim 27 wherein at least one of the layers of liquid-impermeable material is breathable.

30. The bonding process of Claim 27 wherein the bond points are aligned in a pattern such that each bond point is within about 0.001 inch to about 0.20 inch of at least one other bond point.

31. The bonding process of Claim 27 wherein the bond points are aligned in a pattern such that each bond point is within about 0.0025 inch to about 0.175 inch of at least one other bond point.

32. The bonding process of Claim 27 wherein the bond points are aligned in a pattern such that each bond point is within about 0.005 inch and about 0.15 inch of at least one other bond point.

33. ~~The bonding process of Claim 27 wherein the bond points are aligned in at least two parallel rows and the bond points in adjacent rows are offset from one another.~~